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APPLICATION NO.	FI	LING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
09/648,076 08/25/2000		08/25/2000	Siamack Nemazie	Nemazie-01US	5669		
27728	7590	12/14/2004		EXAM	INER		
LAW OFFI		IMAM EET, SUITE 1010		NGUYEN, STEVEN H D			
SAN JOSE,				ART UNIT	PAPER NUMBER		
,				2665			

DATE MAILED: 12/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)
		09/648,076	NEMAZIE, SIAMACK
	Office Action Summary	Examiner	Art Unit
		Steven HD Nguyen	2665
Period fo	The MAILING DATE of this communication ap or Reply	ppears on the cover sheet with the	correspondence address
THE - Exte after - If the - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPI MAILING DATE OF THIS COMMUNICATION nsions of time may be available under the provisions of 37 CFR 1 SIX (6) MONTHS from the mailing date of this communication. It is period for reply specified above is less than thirty (30) days, a reply period for reply is specified above, the maximum statutory period reto reply within the set or extended period for reply will, by staturely received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b).	. 136(a). In no event, however, may a reply be ply within the statutory minimum of thirty (30) of will apply and will expire SIX (6) MONTHS frow the course the application to become ABANDO	timely filed days will be considered timely, om the mailing date of this communication, NED (35 U.S.C. § 133).
Status			
1)⊠	Responsive to communication(s) filed on 09 A	<u> August 2004</u> .	
2a)⊠	This action is FINAL . 2b) Thi	is action is non-final.	
3)□	Since this application is in condition for allows closed in accordance with the practice under	· · · · · · · · · · · · · · · · · · ·	
Disposit	ion of Claims		
5)[Claim(s) <u>1-5</u> is/are pending in the application. 4a) Of the above claim(s) is/are withdra Claim(s) is/are allowed. Claim(s) <u>1-5</u> is/are rejected. Claim(s) is/are objected to. Claim(s) are subject to restriction and/	awn from consideration.	
Applicati	on Papers		
	The specification is objected to by the Examin		
10)	The drawing(s) filed on is/are: a) ac		
	Applicant may not request that any objection to the		
11)	Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the E		• •
Priority ι	ınder 35 U.S.C. § 119		
a)[Acknowledgment is made of a claim for foreign All b) Some * c) None of: 1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority document application from the International Bureasee the attached detailed Office action for a list	nts have been received. Its have been received in Application of the properties of t	ation No ved in this National Stage
Attachmen	, ,	_	
	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948)	4)	ry (PTO-413) Date.
3) 🔲 Inforr	nation Disclosure Statement(s) (PTO-1449 or PTO/SB/08 r No(s)/Mail Date		Patent Application (PTO-152)

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DETAILED ACTION

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Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 3 and 5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As claims 3 and 5, the variables n, k, k' are vague and indefinite because it's unclear what constitutes for it.

Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Swanson (USP 5276425).

Swanson discloses a switching network (Fig 3, Ref 200) comprising a first stage of switches (Fig 3, Ref 205 has m = 9 ($n = 5 \times k = 9$) switches, 220-1 to 220-9) having input lines and output lines including m ($n \times k$) switches, wherein m is an integer number, n is an integer number representing the number of input lines and k is an integer number representing the number of output lines; a second stage of switches (Fig 3, Ref 210 has m = 9 ($k' = x \times k' = 9$)

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switches) comprising of m (k' x k') switches, k' is an integer number representing the number of inputs and outputs a third stage of switches (Fig 3, Ref 215 has m = 9 ($k = 9 \times n = 5$) switches, 220-1 to 220-9) comprising of m (k x n) switches wherein k' = k to allow using m switches in the second stage (See k' = k = 9 when (m = 9 * ((k' = 9)/(m = 9)) = (k = 9)). However, Swanson fails to disclose a function to select k' in such way that $m*O(k'/m) \ge k$ (where O(x/y) denotes the quotient of dividing x by y). However, it would have been obvious to one of ordinary skill in the art at the time of invention was made to apply a function to select k' = k in order to have m switches in each stage into Swanson's system. The motivation would have been to prevent the time of rearrange the connection when a request for point-to-point connection is make via a network.

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5. Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lebizav (USP 5038343).

Lebizay discloses a switching network comprising m identical modules (Fig 5), a module (Fig 5) includes an input stage (Fig 5, Ref Stage 1 has a $(n = M \times k = M \text{ module})$ comprising of a (n x k) switch wherein n is an integer number representing the number of input lines and k is an integer number representing the number of output lines; a middle stage (Fig 5, Ref Stage 2 has a $(n = M \times k = M, module)$ comprising of a $(k' \times k')$ switch, k' is an integer number representing the number of inputs and outputs; an output stage ($n = M \times k = M$, modules) comprising of a ($k \times k$ n) switch. However, Lebizay fails to disclose a function wherein k, k', and m satisfy m*O(k'/m)k >= k. However, it would have been obvious to one of ordinary skill in the art at the time of invention was made to apply a function to select k' = k in order to have m switches in each stage

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into Lebizay's system. The motivation would have been to provide a fast switching network by finding, reserving and setting the path for the signals.

Response to Arguments

In response to applicant's argument that the examiner's conclusion of obviousness is 6. based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See In re McLaughlin, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). In this case, the prior arts such as Swanson/Lebizay disclose a switch network comprising a three stage switching which includes input, output lines and input, middle and output stage. The teaching of Swanson/Lebizay performs the claimed invention by selecting k' = 9 and plug these numbers into the function wherein m = 9, the connection between these stages will perform the function which is described in the claim $m*Q(k'/m) \ge k, k' (=9)$ >= m (=9) * Q (k' (=9)/m (=9), So k' = k = 9. Therefore, it would have been of obvious to one of ordinary skill in the art to apply a function in order to select k' = k = m * Q (k'/m) by suggestion of Fig 3 of Swanson and Fig 5 of Lebizay. The motivation would have been to provide a fast switching network by finding, reserving and setting the path for the signals.

Conclusion

7. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven HD Nguyen whose telephone number is (571) 272-3159. The examiner can normally be reached on 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy D Vu can be reached on (571) 272-3155. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Steven HD Nguyen Primary Examiner Art Unit 2665

12/3/04